EXHIBIT 2

```
Page 1
 1
                  IN THE UNITED STATES DISTRICT COURT
                   FOR THE WESTERN DISTRICT OF TEXAS
 2
                           AUSTIN DIVISION
 3
        UNITED STATES OF AMERICA,
 4
                 Plaintiff,
                                         Case
 5
        v.
                                        No. 1:23-cv-00853-DAE
 6
        GREG ABBOTT, in his
        capacity as GOVERNOR OF
        THE STATE OF TEXAS, and
 7
        THE STATE OF TEXAS,
 8
                 Defendants.
 9
10
11
12
                          ORAL DEPOSITION OF
13
                       KATHY ANN ALEXANDER, PhD
14
                         Monday, July 8, 2024
15
16
                 ORAL DEPOSITION OF KATHY ANN ALEXANDER, PhD,
      produced as a witness at the instance of the Plaintiff,
17
      United States of America, and duly sworn, was taken in
      the above-styled and numbered cause on the 8th of
      July, 2024, from 9:04 a.m. to 11:48 a.m., before Sharon
18
      Ross, Certified Shorthand Reporter in and for the State
19
      of Texas, reported by computerized stenotype machine, at
      the US Attorney's Office for the Western District of
20
      Texas, 903 San Jacinto Boulevard, Suite 334, Austin,
      Texas 78701, pursuant to the Federal Rules of Civil
21
      Procedure and/or any provisions stated on the record or
      attached hereto.
2.2
23
      Reported by:
24
      SHARON ROSS, Texas CSR #1961,
      Hawaii CSR #432, RMR, CRR, CRC
25
      Realtime Systems Administrator
      Job No. CS6783937
```

Q. First sentence there says, "Dr. Alexander is not retained or specially employed to provide expert testimony in this case. Dr. Alexander is a person whose duties regularly involve giving expert testimony in matters relating to water rights" and permitting "management in Texas."

Is that a correct -- is that a correct statement?

- A. That's basically what it says there. I believe that actual text says "expert testimony in matters relating to water rights permitting and management in Texas."
- Q. Okay. So in your current role at TCEQ, your duties include regularly giving expert testimony on water rights, permitting, and management?
- A. Yes.

- Q. And that's what you'll be providing testimony in this case about?
 - A. Yes.
- Q. So a few lines down in that paragraph, it says, "Dr. Alexander is expected to testify regarding"; and then there is a list where it says, "which includes such as." What -- and the first one is "interbasin transfers."

What testimony do you intend to provide

Who are the relevant federal, state, local, and tribal entities?

- A. That's a pretty broad question. Can you --
- Q. Sure. So maybe like --

2.

- A. -- narrow that down a little bit?
- Q. Let's break it up. So you'll -- what testimony do you intend to provide about the relevant federal entities involved?
- A. So I'm here, again, to provide information on TCEQ's water rights permitting program, Chapter 11, and its implementing regulations.

So to the extent that some of our operations are guided by, for example, the International Boundary and Water Commission and its role in ensuring that water is delivered to Texas under the treaty, there may be some information related to that, if I were asked.

- Q. What is TCEQ's role in implementing the 1944 Water Treaty?
- A. TCEQ doesn't have a role in implementing the treaty. The treaty is intended to provide the water for Texas uses -- uses. And once the water has been provided, then Texas law governs how it's used and how we operate the Rio Grande.
 - Q. And then the last item in the list -- or in the

paragraph on Page 8 of Exhibit 1 says "reasonableness of possible improvements to make the Rio Grande River suitable for navigation as proposed by the USA, including between Mile Markers 275.5 and 610."

Are you providing -- are you providing an expert opinion on the reasonableness of the possible improvements?

- A. Yes. That's items 5, 6, and 7 in my opinion.
- Q. What do you mean by "reasonableness"?
- A. So if something's not possible, it's probably not reasonable; and I think that's what I've set out in opinions 5, 6, and 7.
- Q. And then when you say "possible improvements," are those the two that we discussed earlier, the dredging and the canal?
- A. The dredging, the locks and dams, new water rights for navigation under Texas law, the items 5, 6, and 7, in my opinion.
- Q. All right. If you could look at paragraph 1 on Page 9 of Exhibit 1.
 - A. (Witness complies.)
- Q. It says, quote, "State water is defined by

 Texas law as 'the ordinary flow, underflow, and tides of

 every flowing river, natural stream, and lake, and of

 every bay or arm of the Gulf of Mexico, and the storm

requested it.

1

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

- Q. And it could also be an incidental use to another one of the beneficial uses, correct?
 - A. Yes.
- Q. And so just because water has been appropriated for municipal use doesn't mean that it can't be used for navigation?
- A. What that -- so what an incidental use is -- is that is as the water is, for example, released from storage to a downstream user, as it travels down the stream to its ultimate beneficial consumptive use, it may have ancillary benefits such as environment -- the environment or navigation or whatever but it's not an additional amount --
 - Q. Uh-huh.
 - A. -- in addition to the municipal use.
- Q. And so just because there have -- there are no water rights appropriated for navigation doesn't mean that a -- water cannot be navigable, correct?

MR. TEBO: Objection, form.

- A. I don't understand that question at all.
- Q. (BY MR. HARRISON) Looking at the next two sentences, paragraph 2, it says, "In wa" -- Page 9 --
- A. Uh-huh.
 - Q. -- "In water rights that authorize navigation,

navigation is not the only beneficial use authorized in the water right. Navigation is an incidental use whereby water that is diverted or released for other purposes could also be used to support navigation as part of the water" rights -- "water right holder's operations."

And that's what we just talked about?

A. Yes.

Q. And then the last sentence, it says, "The use of water for navigation would not be in addition to the authorized beneficial purposes of use in the water right such as municipal, agricultural, or industrial use."

And that's the same thing that we were also --

- A. Yes.
- Q. What in paragraph 2 on Page 9 of Exhibit 1 constitutes your expert opinion?
- A. So just like with statement 1, this is my expert opinion about how water rights for navigation uses or other non-consumptive uses would work in the State of Texas based on my experience in water rights permitting.
- Q. So moving to paragraph 3, it says, "Water rights in other parts of the state include provisions to protect navigation use, such as subordination of other

Page 51 uses to navigation or cancellation of the water right if 1 the water is needed for navigation. These provisions 2. were included in the water right at the time the 3 water ... was originally granted" -- or "water right was 4 5 originally granted." 6 Did I read that correctly? 7 Α. Yes. And what's the basis for that statement? 8 0. 9 My knowledge of water rights permitting in Α. 10 Texas and what's in particular permits based on 25 years 11 of experience and knowledge of specific permits. 12 Q. And such provisions are not included for any 13 water rights on the Rio Grande --14 Α. No --15 -- to your knowledge? Q. 16 No, they're not. Α. 17 The same question on paragraph 3, what in 18 paragraph 3 constitutes your expert opinion? 19 This is based on my 25 years of experience, Α. knowledge of the Water Code and TCEQ's rules and what's 20 21 embodied in water rights in the State of Texas in terms of their authorizations. 22 23 (Mr. Johnathan Stone is no longer present.) 24 Ο. (BY MR. HARRISON) Paragraph 4 starts at the 25 bottom of Page 9. It says, "TCEQ's Water Rights

just asking if you know who the applicants were for those permits.

1

2.

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

A. So I'm aware of the US Army Corps of Engineers holds a water right for a -- like a duck pond area by Lake Somerville.

The Fish and Wildlife Service holds water rights for wildlife refuges.

The Bureau of Reclamation was identified as an owner on several of their projects, I believe, in -- when they were originally issued.

- Q. And those would have been issued back in the 1950s, '60s, '70s or --
- A. It would vary depending on kind of when the project was initiated. So I -- you know, I don't have an exact date range to give you.
- Q. Were any of the Federal Government permits that were issued for purposes of navigation?
 - A. Not that I'm aware of.
- Q. Were any of the Federal Government permits that you're referencing on the Rio Grande?
- A. I believe some of the wildlife refuges could be on the Rio Grande, but I'm not like 100 percent sure about that.
- Q. If we could turn to paragraph 5 on Page 10 of Exhibit 1, it says, quote, "Releasing water solely for

Page 57

the purposes -- "solely for the purpose of raising the water depth in the Rio Grande for purposes of navigation

And it cites to Texas Water Code section 11.121; is that correct?

is not reasonable because in Texas water right would be

A. Yes.

required" -- I'll stop there.

- Q. What do you mean by -- when you say "not reasonable"?
- A. So if something's not possible, it's not reasonable. I think I've already answered that question.
- Q. But navigation -- I think we've talked about this. Navigation could be an incidental benefit from other beneficial uses, correct?
 - A. It could be.
- Q. And so if the use of water was occurring for other beneficial uses and that resulted in benefits for navigational purposes, a water right would not be required, correct?
 - A. Can you state that again?
- Q. Sure. So if the water -- if the use of the water was occurring for other beneficial uses and navigation was an incidental benefit of that use, they wouldn't need a water right for navigation, would they?

A. If someone was using the water for a beneficial purpose of use, navigation, they would need to add that purpose of use to their water right.

2.

Q. So the rest of the sentence there says, quote, "acquiring a ... water right would not be possible for the following reasons: a, there is no water available for a new appropriation of water in the Rio Grande."

So I think we've talked about this a little bit, but what does that mean?

A. That means that in order -- in order to get a new water right or a new appropriation, water has to be found available. That's in section 11.134 of the Texas Water Code.

And so there is no water in excess of the needs of the appropriators in the Rio Grande. So that means there's no water available for a new appropriation. All the water has been spoken for.

- Q. So no water currently available?
- A. I think there's no water available for a new appropriation in the Rio Grande.
- Q. Are you also speaking for in the future as well?
- A. I think there's no water available for appropriation in the Rio Grande.
 - I don't -- I don't under -- I don't -- in

you to make that kind of decision -- or I would, anyway.

Q. So the second sentence of paragraph 6 says,

"TCEQ" -- of paragraph 6 says, "TCEQ has issued water

rights for these types of projects; however, acquiring a

new or amended water right in the Rio Grande would not

be reasonable as outlined in statement 5."

When you say "these types of projects," what do you mean?

A. Dredging bank stabilization.

- Q. Are you aware of a dredging project in the Rio Grande where TCEQ has issued a water right?
- A. No, but I am aware of dredging projects in other parts of the state where TCEQ has issued a water right because, as I state, if any of the aspect of the project involves storing, taking, or diverting state water, a water right would be required.
- Q. Are there any other reasons why acquiring a new or amended water right would not be reasonable other than the ones listed in paragraph 5?
- A. No. I mean, water availability is a threshold question when making a determination on whether a new permit can be granted.

And if there's limited to no water available for any uses, then we wouldn't be able to issue a new water right.

Q. So the next sentence of paragraph 6 says, "Even if weirs, debris, and other obstacles were removed, releasing water solely for the purpose of raising the water depth in the Rio Grande is also not reasonable because a Texas water right would be required" -- I'll stop there.

What is a weir?

- A. It can be a -- it's a structure that can be put along or in a river.
- Q. (BY MR. HARRISON) Does surface water get diverted when there are weirs in the water?
- A. It can be. A weir can be used to facilitate a diversion.
 - O. And do weirs require a water right permit?
 - A. They can.

- Q. What do you mean by "debris"?
- A. I think the intent of that was to talk about if you went and dredged and moved any kind of -- what someone might perceive as obstructions or whatever from the river, that even if you did that, it -- you still couldn't make a release of water outside the incidental uses that we've talked about for navigation purposes without a water right, which is not possible to get.
- Q. So like debris -- debris would be things like tree limbs or leaves or tree parts, things like that?

- A. Yeah, or, you know, anything else that could have been put in the waterway.
 - Q. Man-made objects?

- A. Somebody could put trash or cars or anything like that. It could also be -- people -- people do those sorts of things.
- Q. And can surface water get diverted when there is debris in the water?
- A. I mean, if someone has an authorized diversion, they can -- they may -- or it may -- the debris may or may not interfere with their diversion. I mean, that's pretty broad.
 - Q. What do you mean by, quote, "other obstacles"?
 - A. I was just trying to be comprehensive.
- Q. So would removal of other obstacles potentially require a water right or permit?
- A. I think it just depends, again, on the nature of the project and the specifics as embodied in the water right permit application.
 - Q. Would other obstacles include nets or netting?
- A. I mean, I don't know that that's an obstacle but, again, I would have to -- it would depend on project specifics.
- And, you know, I can't really answer those type of questions without the specific projects in front

Page 72 1 of me. Q. Would a cableway be an obstacle? 3 Α. On obstacle to what? Well, would it constitute an "other obstacle" 4 5 that you reference in paragraph 6? 6 Α. I don't know. 7 Would anchors constitute an obstacle or "other obstacle" that you reference in paragraph 6? 8 9 A. I wasn't talking specifically when I said 10 "other obstacles." I mean, we could go down a long --11 Ο. Sure. 12 -- laundry list if you'd like; but I'm speaking Α. 13 more generally. 14 But is it your opinion, then, that the removal 15 of other obstacles would require a water right or 16 permit? 17 If any of that was part of a dredging or bank 18 stabilization project or other project that required 19 storing, taking, or diverting state water, a water right 20 permit from TCEQ would be required. 21 The Texas Water Code prohibits obstructing of 22 any navigable stream, correct? 23 There are some provisions related to that. Α. (Alexander Exhibit 6 marked.) 24 25 Q. (BY MR. HARRISON) I'll show you what's marked

not be reasonable because acquiring a new Texas water right would not be possible."

I think we've talked about this before. When you say "not be reasonable," is the reasonable standard the same as what you discussed before?

A. Yes.

- Q. And that's because it -- actually is that because the -- a new water right would not be possible to be acquired?
 - A. Yes.
- Q. Is TCEQ accepting new water rights -- or is TCEQ accepting new water right permit applications for water rights on the Rio Grande currently?
- A. I'm not aware of any but, again, anyone could certain -- could apply but TCEQ would also look at water availability.

And if there's no water available under

Texas Water Code 11.134, we wouldn't be able to grant a

new water right.

So, I mean, someone could apply for anything they wanted to; but that doesn't mean that it can be granted under statute and rule.

Q. So are you saying, then, that a congressionally authorized project to aid navigation is impossible because the Corps could not obtain a Texas water right

1 or water use permit?

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

2.2

2.3

24

- A. I think a Texas water right permit would be required, and I don't believe that would be possible. That's what my opinion says.
- Q. But the Corps or the federal sponsor could apply for the appropriation to Texas, correct?
 - A. They could apply, yes.
- Q. Is it possible the Corps could take existing water rights through condemnation if the project authorizes them to do that?
 - A. I don't know.
- Q. Do you have any new water right application pending from the Corps on these potential navigation projects?
 - A. Not that I'm aware of.
- Q. And so are you providing an opinion that a water right would not issue based on a nonexistent application to TCEQ?
 - A. Okay. Can --
- Q. I can rephrase.
- 21 A. Okay.
 - Q. So there's no pending application that you're aware of for a water right with respect to a hypothetical navigation project, correct?
 - A. That's correct.

Q. If TCEQ does not have a pending application, then how are you in a position to prejudge the determination that would be issued as a result of that -- of that application?

- A. Well, if you're asking me do I know that there -- how do I know that there's no water available for appropriation, I would say 25 years of experience in Texas water rights permitting gives me the ability to make that statement.
- Q. And you don't see that as a pre-decisional result?
- A. No. I think that there are various river basins across the state, including the Rio Grande, where it would not be possible to grant a new appropriation of water because the water has already been committed to other users.

So it's not -- the Rio Grande isn't special in that respect.

- Q. You had testified earlier that the Corps had -that you had worked on the Corps water supply reservoirs
 projects. Could you identify those?
- A. So I think what I had talked about is that we had worked with the Corps of Engineers on various things related to their water supply reservoirs.

I mean, that could range anywhere from the

Page 87 1 River? Α. Yes. And you testified that that included the 1944 3 Water Treaty between the United States and Mexico? 4 5 Α. Yes. 6 Are you also familiar with other binational 7 water treaties that relate to the waters of the Rio Grande River? 8 9 A. Yes. 10 Is it fair to say that you are generally familiar with the binational treaties that relate to the 11 12 waters of the Rio Grande River? 13 A. Yes. 14 Did you testify about interactions between TCEQ 15 and the IBWC? 16 Α. Okay. I --17 I'm sorry. Did you testify today concerning 18 typical interactions between TCEQ and the International 19 Boundary and Water Commission? 20 Yes, in very general terms. 21 Q. Yeah, in general terms. 22 Did you say that the -- or would you say that the IBWC handles the distribution of waters between 23 the United States and Mexico, whereas TCEQ handles water 24 25 pit -- permitting to the US share of waters?

Page 88 1 2 MR. HARRISON: Objection, form. 3 I think that's accurate, yes. Α. (BY MR. TEBO) And did you testify today that 4 5 Texas has primary jurisdiction over the US share of 6 waters of the Rio Grande? 7 Α. Yes, I did. 8 And by that -- I mean, by Texas having primary 9 jurisdiction to the US waters for the Rio Grande, by 10 that phrase did you mean that Texas controls the use of US waters of the Rio Grande? 11 12 Yes. Α. 13 Did you also mean by that phrase that state law 14 and not federal law governs the use of those waters? 15 Yes. Α. 16 Would any use of the Rio Grande's waters by the Ο. 17 US Army Corps of Engineers or other federal entities be 18 subject to approval by Texas including through TCEQ? 19 For a water rights permit, yes, it would. Α. 20 Has any court determined that the Rio Grande 21 River is a navigable stream under state law? 22 MR. HARRISON: Objection, form. 23 Α. Not that I'm aware of. (BY MR. TEBO) And does state law itself define 24 Ο. 25 the Rio Grande as a navigable stream?